In the Specification

Please replace the paragraph beginning on page11, line 16 with the following amended paragraph:

As discussed above, a CT image of a slice results in a two-dimensional image of a cross-sectional plane of the scanned item. The image consists of an array of pixels (e.g., 900 pixels x 512 pixels). According to one illustrative embodiment shown in Figure 5, CT scanner device 3 performs scans at locations along a grid 61, such that slices are imaged at predetermined intervals 63a-c along the length of the item. For example, an article of baggage may be imaged every distance x along its length. In Figure 5, a first slice 65 is imaged at z_1 cm, a second slice 67 is imaged z_2 cm = (z_1 + x) cm, and a third slice 69 is imaged at z_3 cm = (z_1 + 2x) cm. Performing scans according to a grid pattern ensures that potential target objects that may not have been identified as warranting further investigation in step 25 are imaged. For example, sheet explosives may evade identification by the prescanner device because they are thin in profile and minimally attenuate X-rays. The CT scanner, on the other hand, may image a number of planes transecting the sheet explosive, and thus may more readily detect the sheet explosive. Preferably, the imaging points on the grid, discussed above, coincide with the objects warranting further study identified in step 25. For example, the first and third slices in Figure 5 intersect objects 70a, b ~~71a,b~~. If not all objects of interest are accommodated by the grid, additional slices may be taken. Further, the grid is preferably positioned to avoid taking slices of metal objects, for the reasons discussed previously.